PATENT SPECIFICATION (11) 1249900

1249900

DRAWINGS ATTACHED

(21) Application No. 61829/68 (22) Filed 31 Dec. 1968

(31) Convention Application No. P 16 32 482.6

(32) Filed 5 Jan. 1968 in

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(72) Inventor HELMUT SCHÖTTLE

(54) IMPROVEMENTS IN AND RELATING TO IDENTITY CARDS

SPECIFICATION NO. 1,249,900

By a direction given under Section 17 (1) of the Patents Act 1949 this application proceeded in the name of ADREMA PITNEY-BOWES G.M.B.H., a German Company, of Bergstrasse, D6148 Heppenheim, Germany.

THE PATENT OFFICE

R 7026/6

Identity cards are known which consist of a printed carrier of foil, paper or plastics material, laminated on one or both sides with a glass-clear plastics film and provided with a signature panel formed by applying under pressure a heat-sealing tape of matt plastics material. It is intended that an erasure on the signature panel will render visible the printing on the carrier beneath, the erasure thereby being detectable.

The manufacture of such identity cards is complicated and, particularly on account of the laminating operation, expensive. Furthermore, punching identity cards out of sheets which are printed and then laminated requires complicated alignment according to printed register marks. The visibility of the printing may also be spoiled by roughening of the laminated films.

It is an object of the invention to provide an identity card with a safeguard against falsification and easy to manufacture.

According to the invention, an identity card consists of a carrier bearing a thin coating of a material suitable for receiving writing, the coating having its surface formed into a pattern which is easily disturbed by, and thus renders apparent, writing or erasure of writing thereon and the carrier and coating being visually contrasting, such as in colour or surface texture or finish, so as to facilitate detection of disturbance of the coating pattern.

Other features of the invention are included in the following description with reference, by way of example, to the accompanying drawing, in which:—

Fig. 1 is a face view of an identity card according to the invention,

Fig. 2 shows a section on the line II—II of Fig. 1,

Fig. 3 shows, on a larger scale, a portion of the identity card according to Fig. 1,

Fig. 4 shows a section on the line IV—IV of Fig. 3,

Fig. 5 shows, on a reduced scale, part of a sheet out of which identity cards are to be punched, and

Fig. 6 shows a section, corresponding to Fig. 4, of another embodiment.

The identity card shown by Figs. 1 and 2 consists of a carrier which is a card 1 of homogeneous plastics material, for example hard PVC, having a glossy surface. The carrier 1 has a thickness of about 0.5 to 0.7 mm and, on one side, has a signature panel consisting of a substantially thinner coating 2 of a softer plastics material. The coating 2 is highly pigmented so that it has a matt or rough surface suitable for receiving writing. The back of the carrier could also be provided with such a coating to provide another signature panel.

As shown in Figs. 3 and 4, the coating 2 has perforations 3 arranged in a pattern of

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(72) Inventor HELMUT SCHÖTTLE

(54) IMPROVEMENTS IN AND RELATING TO IDENTITY CARDS

(71) We, ADREMA-WERKE G.M.B.H. of 20 Gotzkowskystrasse, 1000 Berlin, Germany, a German Company, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to identity cards which preferably are made of plastics material and each have a signature panel coated with material suitable for receiving writing.

Identity cards are known which each consist of a printed carrier of foil, paper or plastics material, laminated on one or both sides with a glass-clear plastics film and provided with a signature panel formed by applying under pressure a heat-sealing tape of matt plastics material. It is intended that an erasure on the signature panel will render visible the printing on the carrier beneath, the erasure thereby being detectable.

The manufacture of such identity cards is complicated and, particularly on account of the laminating operation, expensive. Furthermore, punching identity cards out of sheets which are printed and then laminated requires complicated alignment according to printed register marks. The visibility of the printing may also be spoiled by roughening of the laminated films.

It is an object of the invention to provide an identity card with a safeguard against falsification and easy to manufacture.

According to the invention, an identity card consists of a carrier bearing a thin coating of a material suitable for receiving writing, the coating having its surface formed into a pattern which is easily disturbed by, and thus renders apparent, writing or erasure of writing thereon and the carrier and coating being visually contrasting, such as in colour or surface texture or finish, so as to facilitate detection of disturbance of the coating pattern.

The coating pattern may be formed by perforations through or recesses in the coating forming rows of letters such as repetitions of a monogram. Preferably the coating is provided on only part of the carrier to form a signature panel.

The invention also provides a method for the manufacture of identity cards in which a sheet of carrier material is printed with the texts of identity cards and simultaneously has applied thereto coatings forming signature panels, cards being then cut from the sheet as subdivisions defined by the printing.

Other features of the invention are included in the following description with reference, by way of example, to the accompanying drawing, in which:—

Fig. 1 is a face view of an identity card according to the invention,

Fig. 2 shows a section on the line II—II of Fig. 1,

Fig. 3 shows, on a larger scale, a portion of the identity card according to Fig. 1,

Fig. 4 shows a section on the line IV—IV of Fig. 3,

Fig. 5 shows, on a reduced scale, part of a sheet out of which identity cards are to be punched, and

Fig. 6 shows a section, corresponding to Fig. 4, of another embodiment.

The identity card shown by Figs. 1 and 2 consists of a carrier which is a card 1 of homogeneous plastics material, for example hard PVC, having a glossy surface. The carrier 1 has a thickness of about 0.5 to 0.7 mm and, on one side, has a signature panel consisting of a substantially thinner coating 2 of a softer plastics material. The coating 2 is highly pigmented so that it has a matt or rough surface suitable for receiving writing. The back of the carrier could also be provided with such a coating to provide another signature panel.

As shown in Figs. 3 and 4, the coating 2 has perforations 3 arranged in a pattern of

rows, the perforations 3 extending entirely through the coating to the carrier 1. Preferably the perforations 3 consist of letters which are arranged in rows and preferably represent repetitions of a monogram.

Since the surface of the carrier 1 is glossy while the coating 2 is dull, both carrier and coating may be white. The glossy surface of the carrier is visible through the perforations of the coating pattern, so that the pattern is recognisable as such.

Recognition of the coating pattern could also be facilitated by making the carrier and the coating different from each other in colour.

The scale of Figs. 1 to 4 and 6 is distorted, the coating in particular being substantially thinner than is indicated in the drawing.

Fig. 5 shows a sheet 4 of plastics material from which identity cards are to be made, the sheet 4 having a size corresponding to the production of three columns of identity cards as indicated by dashed lines. Each of the identity cards is to be provided with a signature panel 5. The signature panels are formed, by the application of coating material, at the same time as the printing of a text in those surfaces or areas of the identity card apart from the signature panel. Also the back of the sheet 4 may be printed. The identity cards are then cut out, preferably punched out, from the sheet 4, there being no need for alignment according to printed register marks. It is merely necessary to align the sheet 4 according to the usual guide rails of a punching machine.

Instead of applying the coatings by a printing operation, a heat-sealing tape 6 of suitable composition or colour, such as is commercially available, may be welded on by means of a heated die stamp. The die stamp must then be engraved or otherwise provided with a pattern so that a corresponding relief or intaglio recessed pattern 7, shown for example in Fig. 6, is formed in the signature panel. The pattern is then clearly visible owing to shadow effect and the varying surface smoothness of the relatively raised or recessed parts of the signature panel. Here again, erasure damages the embossing, so that falsifications are detectable.

WHAT WE CLAIM IS:—

1. An identity card consisting of a carrier bearing a thin coating of a material suitable for receiving writing, in which the coating has its surface formed into a pattern which is easily disturbed by, and thus renders apparent, writing or erasure of writing thereon and the carrier and coating are visually contrasting, such as in colour or surface texture or finish, so as to facilitate detection of disturbance of the coating pattern.

2. An identity card according to claim 1, in which the coating pattern is formed by perforations through the coating to the carrier.

3. An identity card according to claim 1, in which the coating pattern is formed by recesses in the coating.

4. An identity card according to any of the foregoing claims, in which the coating pattern consists of rows of letters.

5. An identity card according to claim 4, in which the letters are repetitions of a monogram.

6. An identity card according to any of the foregoing claims, in which the carrier is a card of homogeneous hard plastics material with a glossy surface and the coating is of softer plastics material with a matt surface.

7. An identity card according to claim 6, in which the coating material is highly pigmented.

8. An identity card according to any of the foregoing claims, in which the coating is provided on only part of the carrier to form a signature panel.

9. An identity card substantially as described with reference to and as shown by Figs. 1 to 3 and 4 or 6 of the accompanying drawing.

10. A method of making identity cards in accordance with claim 8 or 9, in which a sheet of carrier material is printed with the texts of identity cards and simultaneously has applied thereto coatings forming signature panels, cards being then cut from the sheet as subdivisions defined by the printing.

PHILLIPS & LEIGH,
31/33 High Holborn, London, W.C.1.
Chartered Patent Agents.
Agents for the Applicants.

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1249900 COMPLETE SPECIFICATION
1 SHEET This drawing is a reproduction of the Original on a reduced scale

Fig. 1

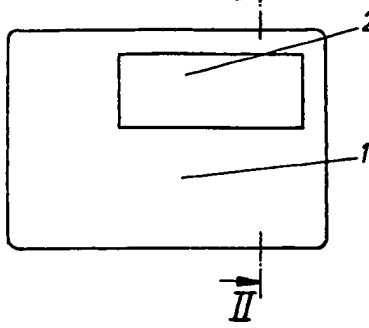

Fig. 2

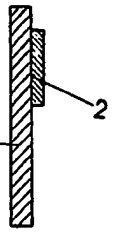

Fig. 3

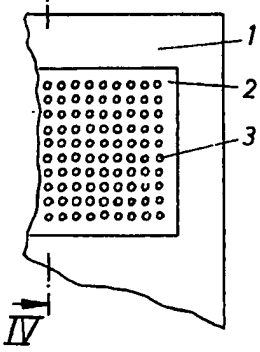

Fig. 4

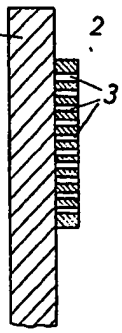

Fig. 6

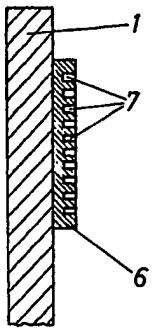

Fig. 5